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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

March 12, 2012

Denison Mines (USA) Corporation  
Christy Woodward  
1050 17<sup>th</sup> Street, Suite 950  
Denver, Colorado 80265

Subject: Third Review of Notice of Intention to Commence Large Mining Operations, Denison Mines (USA) Corporation, La Sal Mines Complex Mine, M/037/0026, San Juan County, Utah

Dear Ms. Woodward:

Thank you for submitting two clean copies of the referenced Notice of Intention to Commence Large Mining Operations. The Division of Oil, Gas and Mining received these copies on March 2, 2012. There are still some items that need to be addressed, especially in the bonding calculations.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages for the original mining notice.

Please submit your response to this review by April 6, 2012.

The Division will suspend further review of the Notice of Intention until receiving your response. Please contact me at 801-538-5261, Tom Munson, at 801-538-5321, Leslie Heppler (lah) at 801-538-5257, or Wayne Western (whw) at 801-538-5263 if you have any questions about the review. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker  
Minerals Program Manager

PBB: tm: eb

Attachment: Review

cc: [Rebecca\\_doolittle@blm.gov](mailto:Rebecca_doolittle@blm.gov)  
[joelnowak@fs.fed.us](mailto:joelnowak@fs.fed.us)

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**THIRD REVIEW OF NOTICE OF INTENTION  
TO COMMENCE LARGE MINING OPERATIONS**

**Denison Mines (USA) Corporation  
LaSal Mines Complex  
M/037/0026  
March 9, 2011**

**105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
1	Figures 12-16	Please label the slope angles with horizontal:vertical units, such as 3H:1V.	lah	
2	Figure 13	Please label slope angles on the cross sections. The slope angles are variable, so please use the arrow to point to the maximum grade and label with horizontal:vertical units.	lah	

**R647-4-113 – Surety**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
3		The earthwork cost sheet for grading the rock pile is confusing. The Means reference number (31 23 16.32 3450) has a unit cost of \$4.55/bcy. The rock pile has a volume of 45,458 cy; $\$4.55/\text{bcy} \times 45,458 \text{ bcy} = \$206,833$ compared to \$37,739.30 as the project cost. If Means unit costs are used for dozing please modify the demolition worksheets instead of using the earthwork worksheets. (2009 Means costs)	whw	
44		If machine and labor costs and production rates are to be used to calculate the cost for grading the rock pile, please use the Means equipment cost. According to Means reference number 01 54 33 20 4360 the dozer used for the work is a 410 horsepower machine. The monthly rental rate is \$16,300 for a 410 horsepower dozer. Assuming 176 hours per month ( $\$16,300/\text{month}/176\text{hr}/\text{month} = \$92.61/\text{hr}$ for equipment costs.) The hourly operating cost is \$95.30, which covers fuel and parts. The equipment overhead is 10%. Equipment cost with overhead and profit is $(\$92.61/\text{hr} + \$95.30/\text{hr}) \times (1.1) = \$206.70/\text{hr}$ . The labor rate is \$62.15/hr for equipment operator (Means reference code is Eqmd). Total cost is $\$206.70 + \$62.15 = \$268.85/\text{hr}$ . Quantity is 45,458 cy, the production rate is 189 cy/hr. $45,458 \text{ cy}/189 \text{ cy/hr} = 240.5 \text{ hrs}$ . $\$268.85/\text{hr} \times 240.5 \text{ hrs} = \$64,658$ compared to \$37,739.30 as the project cost on the worksheet. (Means 2009 costs)	whw	

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
5		<p>The drainage costs worksheet is confusing. According to Means 2009 Heavy Construction Handbook the reference numbers listed on the worksheet should be:</p> <p>31 23 16 13 0120 \$4.10/bcy (93bcy x \$4.10/bcy = \$381.30)</p> <p>31 32 19 16 1500 \$2.70/sy (1425sy x \$4.10/bcy = \$5,842.50)</p> <p>31 37 13 10 0100 \$60.00/lcy (508 lcy x \$60.00/lcy = \$30,480)</p> <p>\$381.30 + \$5,842.50 + \$30,480 = \$36,703.80 compared \$32,367.57</p> <p>Hourly operating costs were used in the worksheet, but those numbers do not relate to the Means reference listed nor to the 1cy excavator associated with the Means reference number.</p> <p>(Means 2009 costs)</p>	whw	
6		<p>If the drainage costs are to be based on equipment and labor cost and production values, please use Means equipment cost reference 01 54 20 0150.</p> <p>The monthly rental rate is \$5,600/month assuming 176 hours/month</p> <p>(\$5,600/month/176 hours/month = \$31.82/hr, equipment costs.</p> <p>Operating cost is \$36.90/hr, which covers fuel and ware parts.</p> <p>Overhead is 10%.</p> <p>Equipment cost is <math>(31.82/\text{hr} + 36.90/\text{hr}) \times (1.10) = \\$75.59/\text{hr}</math>.</p> <p>The labor rate is \$62.15/hr for an equipment operator (Means reference Eqmd.)</p> <p>Total cost is <math>\\$75.59/\text{hr} + \\$62.15/\text{hr} = \\$137.74/\text{hr}</math>.</p> <p>93 bcy/50 bcy/hr = 1.9 hrs. <math>\\$137.74/\text{hr} \times 1.9\text{hr} = \\$261.70</math> compared to \$423.56 on the worksheet.</p> <p>508 lcy/7.75 lcy/hr = 65.5 hrs. <math>\\$137.74/\text{hr} \times 65.5\text{ hrs} = \\$9,021.9</math>.</p>	whw	
7		<p>The material cost for 31 37 13 10 0100 \$31/lcy add 10% overhead and profit then the cost would be \$34.1/lcy.</p> <p><math>\\$34.1/\text{lcy} \times 508\text{ lcy} = \\$17,322.8</math>.</p> <p>(Means 2009 costs)</p>	whw	
8		<p>The material cost for channel construction assumes that suitable material is not available on site and would have to be purchased off site. If suitable material is available on site then it would not need to be purchased.</p>	whw	
9		<p>The costs in the worksheets were from Means 2009. The Division used unit costs from 2009 Means as a comparison. Please use cost from 2012. The Division will provide those costs upon request.</p>	whw	
10		<p>The escalation rate for 2012 is 1.2%.</p>	whw	